**T05D02 - Calorimetry Lab**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Your task is to figure out how many grams of a particular potato chip, peanut, cashew, or other dry food product (of your choice) would be in a specific caloric snack bag. You pick the material, you pick the number of calories you want in your snack bag, and you choose materials and build your own calorimeter. You decide how many trials, how long they should be, what your hypothesis is, and what the variables are. You decide how to collect, present, process, and conclude your data.

You will need to bring in your own material or email Mr. Brakke before 3:30 pm the day before the lab is to be completed in order to assure that you will have the proper materials for your lab. It is very important to build the most efficient calorimeter while still maintaining a safe set of procedures.

You may use any web resources or books as a starting point but if you borrow an idea (even a little one) you must site the idea and state why you thought it was a good idea and the purpose of adding such a material to your apparatus, or step into your procedure. You must site properly, using the MLA citations you are familiar with (both in text, and footnote/bibliography citations).

This lab will be written up completely (D, DCP, CE) and will be due two weeks from the time of the lab. For this reason the expectations are very high!

The following is a guide to help you plan for this lab. Please follow and complete prior to showing up for the laboratory experience.

1. Food Product (specific to brand even):
2. Apparatus (drawing of your set up, NOT a picture from the internet, be creative):
3. Materials (list everything AND circle those that need to be provided by Mr. Brakke):
4. Question:
5. Hypothesis:
6. Independent Variable:
7. Dependent Variable:
8. Control Variables (AND how you will measure and control them):
9. If you include all of the following from above (1-8) in your introduction that would give you a satisfactory grade. If there is any background information (SUCH AS EQUATIONS) that are necessary to include, list them here:
10. What data will need to be collected?
11. How will you collect this data?
12. How will you process this data and get to your “final” answer?
13. How will you show your results (data tables, graphs etc – I recommend both of these at least)?
14. What information will you need to include in your conclusion (results, error, lit values, evaluation, improvements, etc)?